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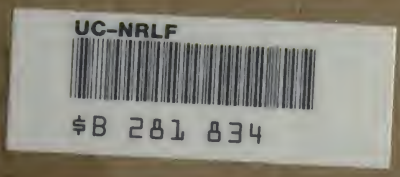

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A MANUAL

of

PHYSICAL EXERCISE

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PREFACE

Men who have really kept themselves fit are few. Those who have conscientiously started in to do this and then abandoned it are a host! There are distinct reasons for this.

First—Because the antiquated systems under which these men have attempted the task have:

1. Occupied too much time.
2. Left men tired instead of refreshed.
3. Exercised muscles which get all they need in a man's ordinary pursuits.

Secondly—Because those who have taught these systems have laid stress upon:

1. Increase in size of the muscles.
2. Ability to do stunts which have no practical use to a man.
3. Unnecessary use of apparatus.

Thirdly—Because they made too necessary the services of a teacher constantly to:

1. Lead the exercises.
2. Keep track of their number and variety.
3. Give special treatment to produce results.

A jaded, exhausted man is of little use to himself or others. and it makes no difference in what part of this great scheme of ours he is placed. He becomes a weak link. Whether he be a soldier, a sailor, a factory operative, a foreman, a superintendent or an executive, his work is rendered only through his physical condition. The same is equally true of the woman. We have been sitting still as a nation until certain all compelling truths of a startling nature were forced home upon us with a vehemence that has left us almost dazed. The examination of our people of military age, brought about by the draft, demonstrated how unfit we were to face war conditions. We were not the first to find this out, but, lulled into security through the sense of the thousands of miles separating us from the scene of conflict, and the fact that we were not then involved, we calmly folded our hands and watched others go through the waking up process, while we slumbered on.

The object of the formation of this Committee on Physical Reserve is to correct this condition throughout the land. The instructions that follow are given in careful detail and are based on broad tests. The man or woman following them need in no way dispense with his or her own athletic pleasures—golf, tennis and the like—any more than men in military service dispense with their own physical work. The system is preparatory, exhilirating, and at the same time increases the strength of the heart and lungs, the suppleness of the trunk and, finally, keeps at a high point the resistive forces of the body.

Walter Camp

381923

THE DAILY DOZEN SET-UP

"A shorthand system of
setting-up exercises."

[If used in preparing men for entering in service, the Leader* should march the men at quick time for five hundred yards, then face them about and bring them back for two hundred yards on the double-quick, and the remaining three hundred yards at quick time.]

*While it is more interesting and better to go through these exercises in a group with a leader, group work is not absolutely necessary. After learning the movements the essential thing is to go through them **regularly every day.**

The DAILY DOZEN SET-UP consists of twelve exercises which, for ease in memorizing, are divided into four groups of three exercises each. Each exercise or movement is given a name, and the names of all the movements of a group commence with the same letter, thus:

I.	1. HANDS	II.	1. GRIND
	2. HIPS		2. GRATE
	3. HEAD		3. GRASP
III.	1. CRAWL	IV.	1. WAVE
	2. CURL		2. WEAVE
	3. CROUCH		3. WING

These exercises are not difficult nor exhausting, and do not demand great strength for proper execution, but they are designed, both from a scientific and practical point of view, to give exactly the right amount of exercise to every muscle of the body. They are intended to promote suppleness and especially to strengthen those muscles which are seldom brought into play in ordinary daily life. A conscientious fifteen minutes a day with the DAILY DOZEN SET-UP will soon do more for a man than any amount of skillful physical feats or "strong-man stunts." When one first practices these movements, their effect will be felt on the little-used muscles of the neck, back and stomach; yet they will not leave the pronounced muscular fatigue which follows the ordinary exercises, and which is of more harm than good.

Any setting-up exercises should be preparatory; that is, make men ready for the serious work of their day, and in no way exhaust any portion of their vitality. This modern "shorthand" method of setting-up leaves men in an exhilarated condition, and, instead of taking anything out of them, prepares the body for any kind of work that is required in the service, or in every day life.

Each exercise starts from the position of Rest:

1. Stand erect: with heels about 6 inches apart and directed straight forward.
2. Knees straight without stiffness.
3. Body erect on hips, inclined a little forward; shoulders square and falling equally.
4. Arms and hands hanging naturally, backs of the hands slightly forward; thumbs along the seams of the trousers; elbows a trifle out from the body.
5. Head erect and straight to the front, chin slightly drawn in without constraint, eyes straight to the front. See Figure 1.

The Leader takes a position facing the men who should be so placed as to give ample room for unhampered movement.

Each movement should be executed in time with the orders or counting of the Leader which should, with the exception of the Speed Test, which is a catch exercise, be slow and measured. These exercises do not depend upon snap for their effect, but upon steady, deliberate strain of the muscles. Any tendency towards hurried, careless execution should be immediately discouraged by the Leader who should, at all times, insist upon uniformity of movement.

In the following instruction, the preparatory commands are in capitals, thus: ORDER. The commands of execution are in italics, thus: *Hands.* Explanation of each movement is given in parentheses.

1. HANDS

2. CROSS

3. HIPS

4. HEAD

GROUP 1.

1. HANDS

HANDS:

READY:

Cross. (At *cross,* arms are extended laterally and horizontally, palms down. See Figure 2.)

ORDER:

Hands. (At *hands,* the arms are brought back to a position of Attention close to the sides. See Figure 1. **Especial care should be taken to see that whenever, thruout the exercises, this position is taken—as at the completion of each exercise—full control is retained over the arms, and the hands should not be allowed to slap against the sides audibly.)**

ORDER:

Rest. (At *rest,* always return to the position described on previous page. In this case there would be no change.)

2. **HIPS**

HIPS:

READY:

Cross.

ORDER:

Hips. (At *hips,* the hands are placed on the hips with shoulders, elbows and thumbs well back. See Figure 3.)

ORDER:

Rest.

3. **HEAD**

HEAD:

READY:

Cross.

ORDER:

Head. (At *head,* the hands are placed behind the neck, index fingertips just touching, and elbows forced back. See Figure 4.)

ORDER:

Rest.

The above exercises should be executed but a few times each, being preparatory to the Speed Test.

SPEED TEST

In this, the preparatory command, ORDER, is omitted and the Leader gives the commands, *Head, hips, hands, etc.,* in sharp succession, varying them, and occasionally repeating a command in a manner calculated to catch the unwary napping.

The length of time devoted to this movement is left to the discretion of the Leader, who should also occasionally vary his method by giving the order, for example, "Hips," but he himself executing one of the other two movements as "Head" in order to see if the men are actually listening to his order or only watching him.

5. GRIND

6. GRATE-Upper Position

7. GRASP

GROUP II.

1. **GRIND**

GRIND:

READY:

Cross.

PALMS:

Turn. (At *turn,* the palms are turned up with backs of hands down and arms forced back as far as possible. See Figure 5.)

ORDER:

Grind. (At *grind,* and in time with the Leaders' measured counting, circles of twelve inch diameter are described with the finger-tips

one

two

three which move forward and downward, the
four backward and upward, the arms remaining
five stiff, and pivoting from the shoulders. On th
to backward movement of the circle, the arm
ten should be forced back to the limit. A com
plete circle should be described at each count.
Reverse. (At *reverse,* the same process should be gon
one thru, the circle being described in the opposit
to direction.)
ten

ORDER:
Rest.

Ten circles are described in each direction.

2. **GRATE**

GRATE:
READY:
Cross.
ORDER:
Grate. (At *grate,* and as the Leader counts *one,* tl
one arms are slowly raised, as a deep inhalatic
two is taken, to an angle of 45 degrees fro
horizontal, and at the same time the hee
are raised till the weight of the body rests c
the balls of the feet. See Figure 6. At *tw*
the arms are returned to *cross,* as all air
exhaled, and the heels are lowered to a no
mal position. Care should be taken to se
that the arms are not allowed to drop belo
the level of the shoulders or rise more tha
45 degrees.)

ORDER:
Rest.

The arms should be raised and lowered ten times.

3. **GRASP**

GRASP:
READY:
Cross.
ORDER:
Grasp. (At *grasp,* the position, *head,* is taken. S
one Figure 4. With head up and eyes front, ar
two in time with the Leader's counting, *one, tw*
three *three, four,* the body is bent forward fro
four the waist, as far as possible. See Figure
one The body is returned to upright in the san
two number of counts and at an unusually slo
three *one* is bent as far back as comfortable fro
four the waist, being returned to upright at *tw*
one Care should be taken to see that this motion
two sustained and not jerky.)

ORDER:
Rest.

The entire movement should be repeated five times.

8. CRAWL-Upright Position

9. CRAWL-Crawl Position

10. CURL-Curl Position

11. CURL-Arms Forward

GROUP III.

1. **CRAWL**

READY:
Cross.

ORDER:

Crawl.
one
two
three
four
one
two
three
four

(At *crawl,* the left palm is turned up and as the Leader counts *one, two, three, four,* the left arm is raised and the right arm lowered laterally until at *four* the right arm should be in a position of *hands,* and the left arm should be extended straight up with the palm to the right. See Figure 8. Then, as the Leader counts *one, two, three,* the body is slowly bent sidewise from the waist, the right

hand slipping down the right leg to or beyond the knee and the left arm bending in a half circle over the head until the fingers touch the right ear. See Figure 9. At *four* the position of *cross* is quickly resumed, and as the Leader commences to count again, the RIGHT palm is turned up and the exercise completed in the opposite direction.)

ORDER:

Rest.

The entire movement should be repeated five times.

2. **CURL**

CURL:

READY:

Cross. (In this movement, at *cross,* the feet are spread until the heels are about twelve inches apart. The left foot remains stationary, the right foot being moved to accomplish this.)

ORDER:

Curl.
one
two
three
four
one
two
three
four
one
two
three
four

(At *curl,* and as the Leader counts *one, two. three, four,* the fists and lower arms are bent DOWN from the elbows which are kept pressed back, and the fists are curled into the arm pits. This position should be reached at *three,* when the head and SHOULDERS should be forced up and back, reaching the limit of motion at *four.* See Figure 10. The Leader again counts *one, two, three, four.* At *one* the arms are extended straight forward from the shoulders, palms down. See Figure 11. At *two* the arms begin to fall and the body bends forward from the waist, head up and eyes front, until at *four,* the body has reached the limit of motion and the arms have passed the sides and have been forced back and (as the trunk assumes a horizontal position) up as far as possible. See Figure 18. For a third time the Leader counts *one, two, three, four,* as the body is straightened, reaching an upright position with arms straight forward at *three. Cross* is resumed at *four.* As the body is straightened from the *wing* position, a full breath should be taken, the lungs being slowly filled to the maximum as the *curl* is again reached at *"cross four."* This breath should be retained only a second, and exhaled as the *wing* position is taken. Inhale thru the nose.)

ORDER:

Rest.

The entire movement should be repeated five times.

12. CROUCH

13. WAVE

14. WEAVE - Turn Position

3. **CROUCH**

CROUCH:

READY:

Cross. (In this movement, at *cross,* the feet are spread until the heels are about twelve inches apart. The left foot remains stationary, the right foot being moved to accomplish this.)

ORDER:

Crouch, one two (At *crouch,* the knees are bent and, with the weight on the toes, the body is lowered as nearly to the heels as comfortable, keeping the trunk as nearly erect as possible. See Figure 12. This is done at *one* and at *two* the upright position is resumed.)

ORDER:

Rest.

The entire movement should be repeated ten times.

GROUP IV.

1. **WAVE**

WAVE:

READY:

Cross.

ORDER:

Wave.
one
two
three
four

(At *wave,* the arms are stretched straight above the head, fingers interlaced and arms touching the ears. See Figure 13. Then, as the Leader counts *one, two, three, four* a complete circle, of about twenty-four inches diameter, is described with the hands, the body bending only at the waist. The trunk should be bent as far backward as forward, and as far to one side as to the other. The body should be forward at *one,* to the right at *two,* backward at *three,* and to the left at *four* The motion should be steady and not in jerks.)

Reverse.
one
etc.

(At *reverse,* the same movement should be repeated in the opposite direction, i.e., to the left.)

ORDER:

Rest.

(At ORDER, the body should be brought to an erect position, stretching the arms up as far as possible; and at *rest,* the arms should drop slowly, laterally, to a *hands* position.)

Five circles should be described in each direction.

2. **WEAVE**

WEAVE:

READY:

Cross.

(In this movement, at *cross,* the feet are spread until the heels are about twelve inches apart. The left foot remains stationary, the right foot being moved to accomplish this.)

ORDER:

Weave.
one
two
three
four
one
two
three
four

(At *weave,* and as the Leader counts *one, two, three, four,* the body is turned to the left from the hips, the arms maintaining the same relation to the shoulders as at *cross,* until at *one,* the face is to the left, the right arm pointing straight forward (in relation to the feet) and the left arm straight backward. See Figure 14. At *two,* the body is bent from the waist so that the right arm goes down and

15. WEAVE - Bend Position

16. WEAVE - Combination Turn & Bend

17. WING - Stretch Position

18. WING - Wing Position

the left up, until, at *three*, the fingers of the right hand touch the ground midway between the feet. The left arm should then be pointing straight up, with the face still to the left. The right knee must be slightly bent to accomplish this position. See Figure 15. At *four*, the position of *cross* is resumed and as the Leader again counts *one, two, three, four,* the same movement is repeated with the left hand touching the ground this time. Thruout the exercise, care should be taken that the arms remain in the same straight line, making no separate movement, but changing their position only as the trunk and shoulders

are moved and carry the arms along. After this exercise has been thoroly mastered, the turning and bending movements made on the counts, *one* and *two,* should be combined, i.e., instead of making the entire turn, as described above, before bending, turn and bend simultaneously. See Figure 16.)

ORDER:
Rest.

The entire movement should be repeated ten times.

3. **WING** (At *wing,* and as the Leader counts *one, two, three, four,* the arms are raised laterally until they are extended straight upward at *one,* with a full inhalation. See Figure 17. At *two,* the arms begin to fall forward and downward and the body bends forward from the waist, head up and eyes front, until at *four,* the body has reached the limit of motion and the arms have passed the sides and have been forced back and (as the trunk assumes a horizontal position) up as far as possible. See Figure 18. As the Leader again counts *one, two, three, four,* the body is straightened, reaching an upright position, with arms vertically extended, at *three.* At *four,* the arms are lowered to a *cross* position, but with palms up and arms and shoulders forced hard back. Very slow counting is essential to the correct execution of this exercise. All air should be forced from the lungs as the body bends forward to the *wing* position, and they should be filled to capacity as the body is straightened and the arms brought down. Inhale thru the nose.)

WING:
READY:
Cross.
ORDER:
Wing.
one
two
three
four
one
two
three
four

ORDER:
Rest.

The entire movement should be repeated five times.

THE PROBLEM OF DEVELOPING AND MAINTAINING PHYSICAL VIGOR for the sedentary worker is threefold: it consists in part in physical exercise sufficient to keep the muscles in tone, to prevent flabbiness and to secure an erect posture; it involves controlling the environment so that the surroundings may be conducive to and not deleterious to health; and, finally, it demands careful selection of food and drink and intelligent care of the body functions. These requisites are not onerous for one who cares about personal efficiency; they are simple as regards their execution; they will give results in health dividends. These three are the tripod of health and may be easily remembered under the words, EXERCISE, ENVIRONMENT and EATING. The three E's are the beginning of Efficiency:

EXERCISE.

The morning "Daily Dozen" will start the day right. They should be made a habit in which no omissions can occur. To secure the most good they are to be supplemented with walking to the office (whenever possible—three to four miles is not too much), week-end tennis, golf, swimming, skating, and outdoor sports that are suited to the individual's needs.

ENVIRONMENT.

The home environment is important. Keep it cheerful and clean. Optimism is a powerful stimulant. Food digests readily when seasoned with smiling sauce and served with laughter and happiness. Keep worry out of your life. It kills initiative, driving power, strength and vigor.

Have the air as clean as your collar. You only wear the collar; you breathe air. Sleep with open windows. Avoid places with flies and dirt. Don't overheat your home or office. Keep the temperature at 68° Fahrenheit. Don't miss the daily bath!

EATING.

The pig lives to eat. For man eating should be a means of supplying energy that enables one to live a vigorous, efficient life. Oh! enjoy it!—but choose between palate and performance. Eat meat only once a day and after forty, little of that. Drink all liquids slowly and chew all food thoroughly. Control the amount of food eaten by the amount of energy expended. Eat *less* when you are *inactive physically* and in *warm weather*. Drink seven or eight glasses of water daily. Leave alcohol alone and live longer and more efficiently. It doesn't give vigor.

Gasoline is necessary for the running of the motor-car; but if the carbon is not removed, power is lost. Keep the carbon removed by regular habits, and avoiding constipating food.

The following list of laxative and constipating food suggestive:

LAXATIVE.

Liquids:		
Malted milk	Grapes	Turnips
Kumyss	Peaches	String beans
Junket	**Vegetables:**	Kale
Mineral waters	Tomatoes	Oyster plant
Buttermilk	Cucumbers	**Miscellaneous**
Cider	Potatoes	Honey
Fruits:	Carrots	Herring
	Beets	Sardines
Oranges	Onions	Mackerel
Grape fruit	Spinach	Butter
Apples	Cabbage	Suet
Prunes	Corn	Vegetable oils
Watermelon	Oatmeal	Mineral oils
	Brussels sprouts	Cream

CONSTIPATING.

Liquids:	Fruits:	Spaghetti
Milk	Blackberries	Macaroni
Hard water		
Tea	**Miscellaneous:**	Fresh breads
Cocoa		
Chocolate	Eggs	Farina
Alcohol	Cheese	Some meats

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